

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO Box 1450 Alexandria, Virginia 22313-1450 www.unpto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/535,589	11/30/2005	Rainer Domesle	13501PCTUS	7501	
23719 KALOW & SI	7590 06/25/200 PRINGUT LLP	EXAMINER			
488 MADISO		STALDER, MELISSA A			
19TH FLOOR NEW YORK,			ART UNIT	PAPER NUMBER	
			1793		
			MAIL DATE	DELIVERY MODE	
			06/25/2009	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No.	Applicant(s)		
10/535,589	DOMESLE ET AL.		
Examiner	Art Unit		
MELISSA STALDER	1793		

Office Action Summary	Examiner	Art Unit					
	MELISSA STALDER	1793					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DY Extensions of time may be available under the provisions of 3 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the macrimum statutory period way. The provision of	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this o D (35 U.S.C. § 133).	,				
Status							
1) Responsive to communication(s) filed on 17 Me	arch 2009.						
2a) This action is <b>FINAL</b> . 2b) This action is non-final.							
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4) Claim(s) 1-9 and 11-16 is/are pending in the application.							
4a) Of the above claim(s) is/are withdray	vn from consideration.						
5) Claim(s) is/are allowed.							
<ol> <li>Claim(s) <u>1-9 and 11-16</u> is/are rejected.</li> </ol>							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	r election requirement.						
Application Papers							
9) The specification is objected to by the Examine	r.						
10) The drawing(s) filed on is/are: a) acce	epted or b) objected to by the I	Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form P	ΓO-152.				
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).					
1. ☐ Certified copies of the priority documents have been received.							
Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau	ı (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)		Interview Summary (PTO-413)     Paper No(s)/Mail Date					
3) X Information Disclosure Statement(s) (PTO(Shirth)	5) Notice of Informal P						

- Paper No(s)/Mail Date \_
- 6) Other:

Application/Control Number: 10/535,589 Page 2

Art Unit: 1793

### DETAILED ACTION

## Claim Rejections - 35 USC § 103

 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior at are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt (US 5,139,993) in view of Maus (US 6,534,021). Schmidt teaches a method of improving the thermal shock behavior of monolithic catalysts using a pre-coating dispersion process to be used on ceramic monolithic catalyst carriers. However, Schmidt does not teach a catalyst support with two structures with different absorbtivity. Maus teaches a filter body made of foils and a porous ceramic body. It would have been obvious to one of ordinary skill in the art at the time of the invention because Schmidt teaches coating a monolithic catalyst and Maus teaches a filter body. Therefore, it would have been obvious to apply this pre-coating to another type of gas filter. Although Schmidt teaches pre-coating for a different reason, the dispersion is the same as the process disclosed reads on the present claims.
- Regarding claims 2 and 7, Schmidt teaches the addition of an organic filling
  agent which can be melted, burned out and is insoluble in water into the catalytic carrier
  before the application of the catalytically active component (col. 2, lines 50-54).

Application/Control Number: 10/535,589

Art Unit: 1793

- Regarding claims 3 and 8, Schmidt teaches that the material that can be bumt
  out is a higher hydrocarbon such as paraffin wax or a polymer such as polyethylene
  wax (col. 2, lines 20-22).
- 5. Regarding claims 4-6, Schmidt teaches that the carrier is pre-coating with the organic filling agent by treatment with an aqueous dispersion (col. 3, lines 1-7). Schmidt teaches that possibly emulsifiers are fatty alcohol, polyglycol ethers, or nonylphenyl polyglycol ethers (alcohols) (col. 3, lines 22-24).
- Regarding claim 9, Schmidt teaches a pre-coating process where the catalysispromoting metal oxide film, which optionally contains the catalytically active component, is applied onto the carrier by means of dispersion coating technique (col. 2, lines 60-64).
- Regarding claim 11, Schmidt teaches that the highly dispersed dispersion in the aqueous system is impregnated into the carrier (col. 2, lines 54-56).
- Regarding claim 12, Schmidt teaches that after treatment the catalysts were placed into a furnace and heated, then removed and cooled in air (calcined) (col. 5, lines 15-18).
- Regarding claim 13, Schmidt teaches a catalyst that can be produced through the coating support process (claim 1).
- 10. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maus (US 6,534,021) in view of Koschlig (US 4,916,106). Maus teaches a filter body with a ceramic body and metal foils. Koschlig teaches a supported catalyst and the process for its production where the porous carrier is coated with 8.9%, 7.3 %, 14.4%, and 15% by weight of the prepared catalytic material (Table II. III. IV. and Example 7). It

Art Unit: 1793

would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Maus with the percentage of coating of Koschlig because the porous ceramic support materials have a larger specific surface area available for active catalyst contact and so need less active coat (col. 1. lines 36-54).

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA STALDER whose telephone number is (571)270-5832. The examiner can normally be reached on Monday-Friday, 8:00-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Melvin Curtis Mayes can be reached on 571-272-1234. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Application/Control Number: 10/535,589 Page 5

Art Unit: 1793

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MS 06-18-09

/Melvin Curtis Mayes/ Supervisory Patent Examiner, Art Unit 1793